

**PROJECT REPORT ON
E-COMMERCE WEB APPLICATION**



**Advanced Computing Training School
Jaipur**

Project Guide:

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**PROJECT REPORT
ON
E-COMMERCE WEB APPLICATION**

Submitted in Partial fulfillment for the award of Post Graduate
Diploma in Advanced Computing



CERTIFICATE

This is to certify that the project

E-COMMERCE WEB APPLICATION

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FOR THE AWARD OF DIPLOMA IN ADVANCE COMPUTING
EMBODIES THE BONAFIDE WORK DONE BY THEM UNDER MY
SUPERVISION

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Chapter 1: INTRODUCTION

An E-Commerce Web Application from where customers can buy and vendors can sell their products. In this customer can see various types of products according to categories. Delivery Person will deliver the product to customers, customer can track their order status throughout the purchase cycle. Vendor need authorization to add products from admin, All users will require a authenticated account with valid email id, mobile no and password.

1. PURPOSE

1. Increased access:

E-commerce has made it easier for businesses to reach people around the world and run their operation without approaching their suppliers directly.

2.Reduces competitive gap:

E-commerce reduces marketing and advertising expenses. So, smaller companies can also compete on quality, price and availability of goods with the bigger companies.

3.Set deadlines

Deadlines are the reality of working individually or in big teams. Be sure to pick deadlines that feel both realistic for the project and the team members working on it.allows you to set these deadlines for larger project tasks and subtasks.

2.What is Personal task management tool portal all about

The primary purpose of project management tools is to help managers plan, execute and control all aspects of the project management process.

Companies rely on key tools for managing a project to ensure **that each task** is completed on time and to balance staff workload for optimal time management.

2. FUTURE OF PROJECT :

1. User Registration

E commerce Web Application for this tool available with a form having multiple fields like name,email,password etc.

User is identified on the basis of a unique combination of ID ,Username and password specified at the time of registration.

Registered user management tool can easily then access the tool once they log in using their credential specified at the time of registration.

2. Software System Attributes:

- 1) **Security:** Only authorized user will be able to access the website by entering the correct login username and the corresponding password.
- 2) **Maintainability:** The application can be maintained in present or future. It will be easy to incorporate new requirements in the individual modules.
- 3) **Portability:** As the application is based on Angular 6 and node so it will be easily portable on various system.
- 4) **Scalability:** As the application is based on Angular 6 and node so it will be highly scalable.
- 5) **Efficiency:** As the application is based on Angular 6 and node so it will be highly efficient.
- 6) **Throughput:** As the application is based on Angular 6 and node so it will be highly throughput.

Chapter 2: FEASIBILITY STUDY AND REQUIRMENTS

A feasibility study **analyzes the potential strengths and weaknesses of a business venture and assesses its overall workability**. If you are starting a new business or want to develop an independent operation in a new market area, a feasibility study is a worthwhile investment.

A well-designed feasibility study should provide a **historical background of the business or project**, a description of the product or service, accounting statements, details of the operations and management, marketing research and policies, financial data, legal requirements and tax obligations.

1) Technical Feasibility:

The assessment of technical feasibility centres on the existing system and to what extend it can support the proposed system. This was based on and outlines design of system requirement in turns of turns of inputs, files, program, procedures, and staff. It involves financial consideration to accommodate technical requirement.

2) Operational feasibility:

An estimate should be made about the reaction of the user staffs towards development of computerize system. Computer installations have something to do with the overall performance of the project to make it acceptable to the user keeping pace with the other factors in client side installation environment etc. The conclusions of the feasibility study are in the flow you will go through the report.

1. Hardware & Software Required For Development:

Web-Browser	:	Google -chrome
Deployment Environment	:	Web Browser
Front-end	:	React
Back-End	:	Spring Boot
Technology Used	:	react, Database, MySQL

2.Required User Characteristics

- A) Educational level: Users should be comfortable with colloquial English.
- B) Experience: No prior experience is required
- C) Skills: Users should have basic knowledge and should be comfortable using general-purpose application on computers.

2. System Design Paradigm

Water fall model is used to carry out the project.it is simplest model,which states that software development phases are organized in linear order.

3. Easy accessibility

Customers shopping a physical store may have a hard time determining which aisle a particular product is in. In e-commerce, visitors can browse product category pages and use the site search feature the find the product immediately.

4. Wide availability

Amazon's first slogan was "Earth's Biggest Bookstore." They could make this claim because they were an e-commerce site and not a physical store that had to stock each book on its shelves. E-commerce enables brands to make a wide array of products available, which are then shipped from a warehouse after a purchase is made

5. Lower cost

Pure play e-commerce businesses avoid the cost associated with physical stores, such as rent, inventory and cashiers, although they may incur shipping and warehouse costs.

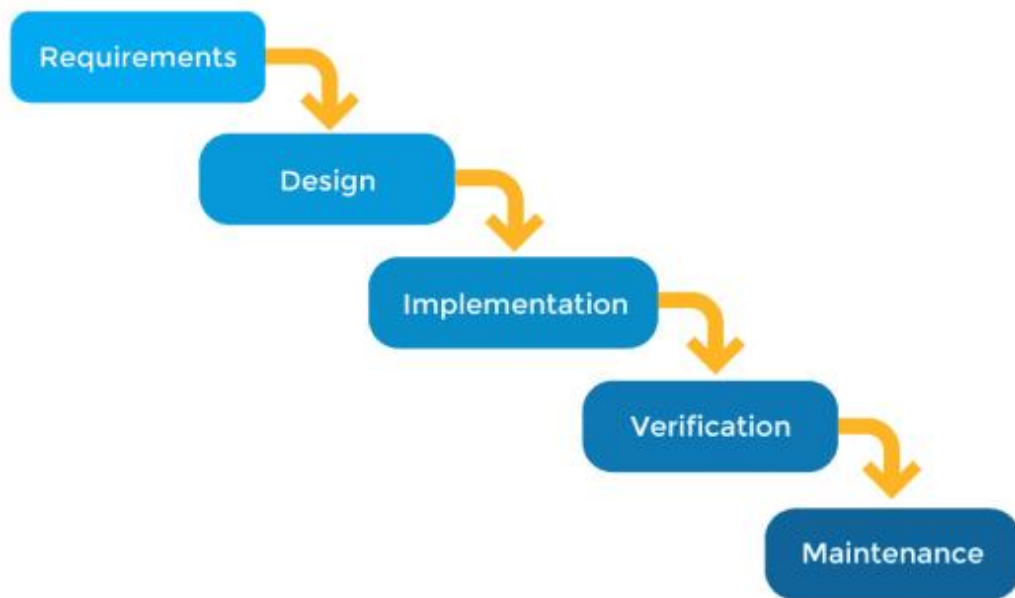
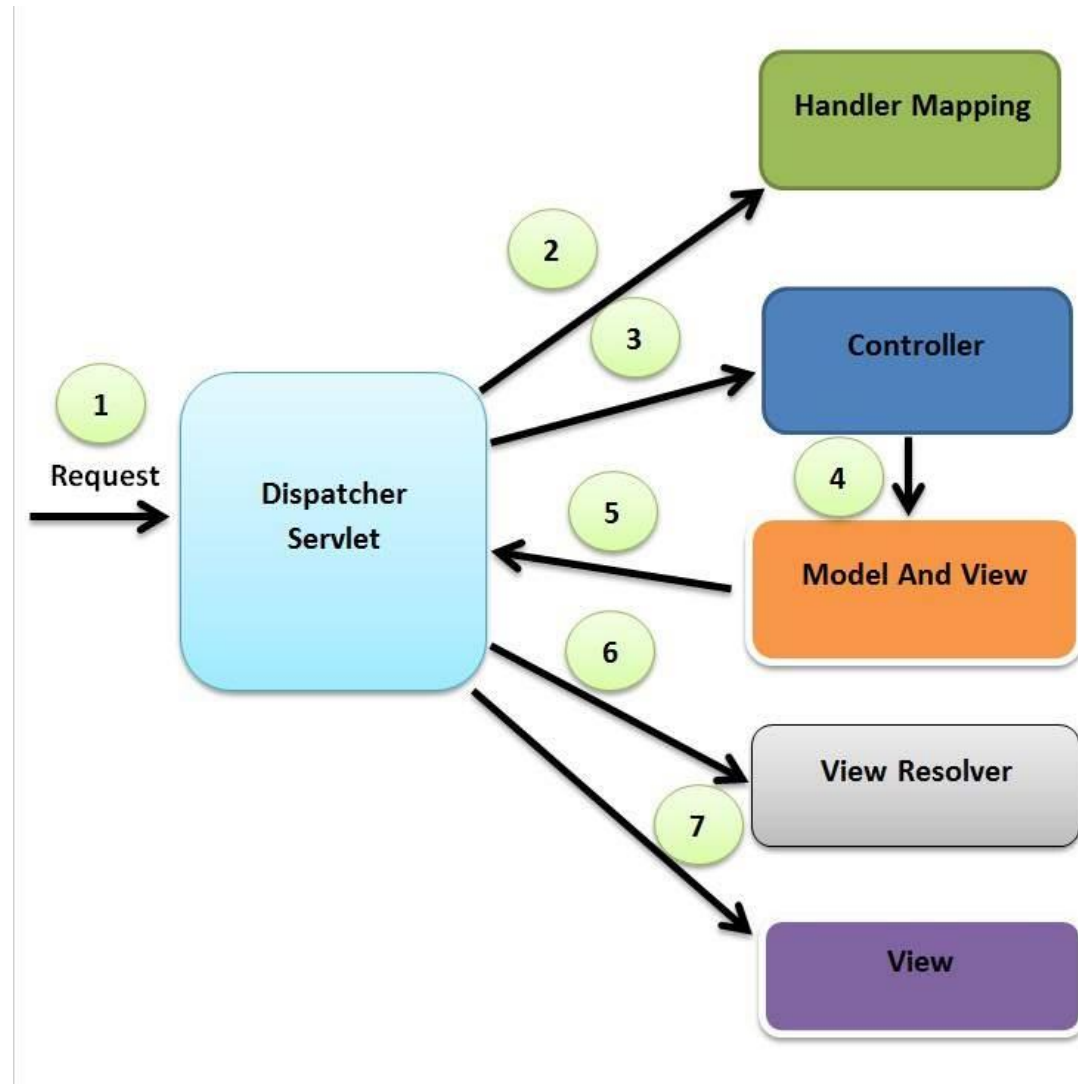


Fig 1: Waterfall Model

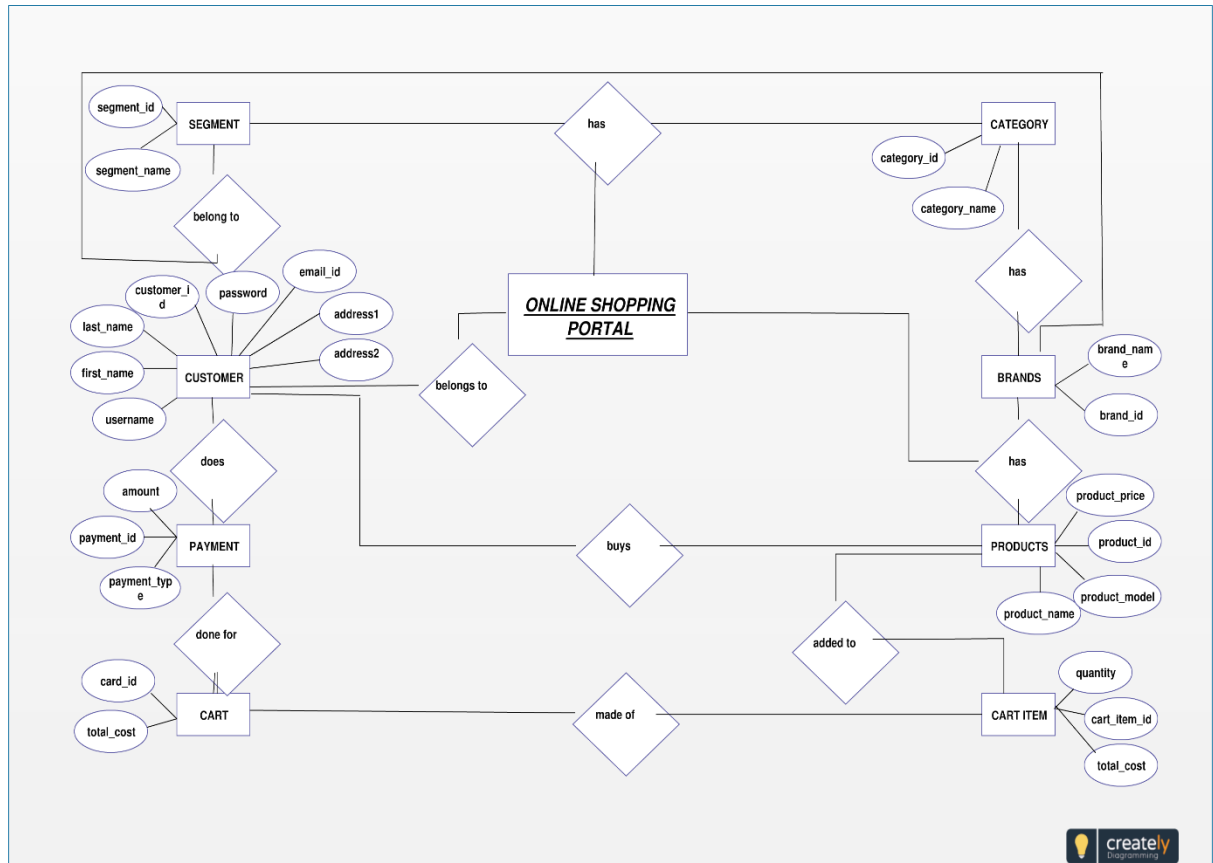
Chapter2. Application

1. E-retailing or on-line retailing is the selling of goods from Business-to-Consumer through electronic stores that are designed using the electronic catalog and shopping cart model.
2. Data collection about customer behavior, preferences, needs and buying patterns is possible through Web and E-commerce
3. Customers can check the balances of their savings and loan accounts, transfer money to their other account and pay their bill through on-line banking or E-banking.
4. Some companies form an electronic exchange by providing together buy and sell goods, trade market information and run back office information such as inventory .

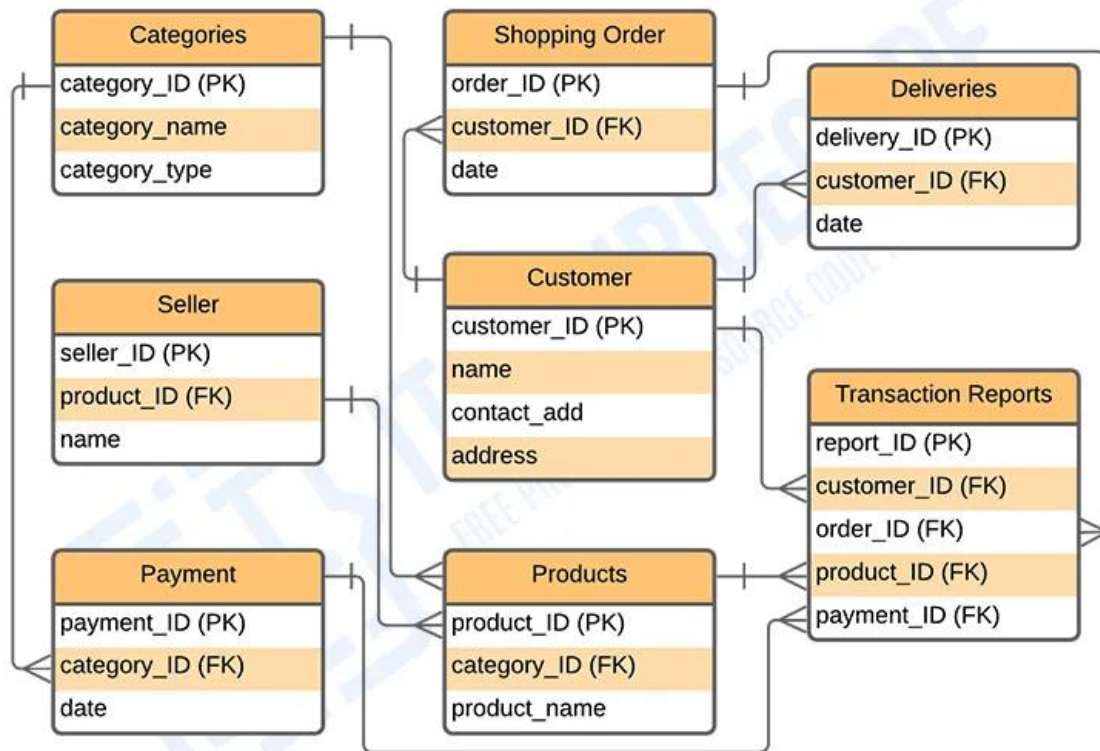
Fig3.Express MVC Architecture

Chapter 3: ERD AND DFD

1. ER-Diagram:

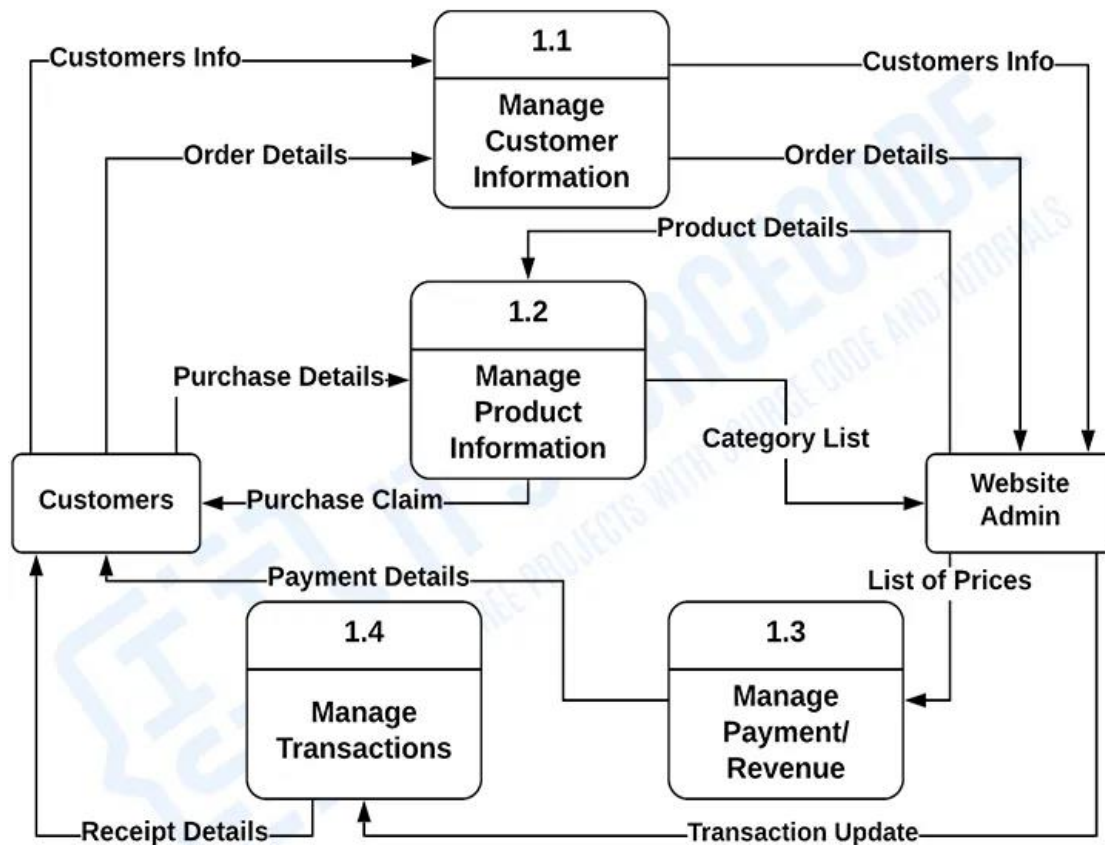


E-COMMERCE WEBSITE SYSTEM



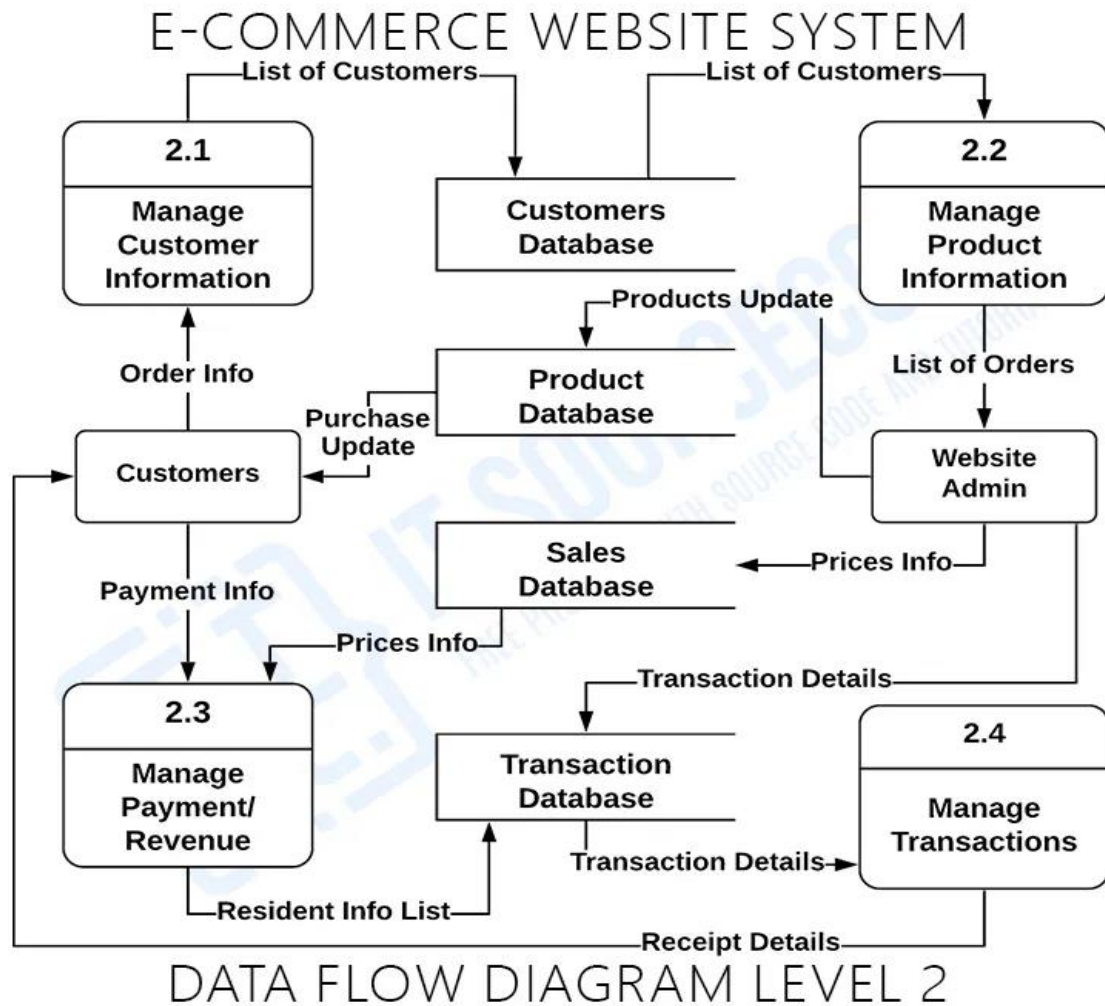
ENTITY RELATIONSHIP DIAGRAM

E-COMMERCE WEBSITE SYSTEM



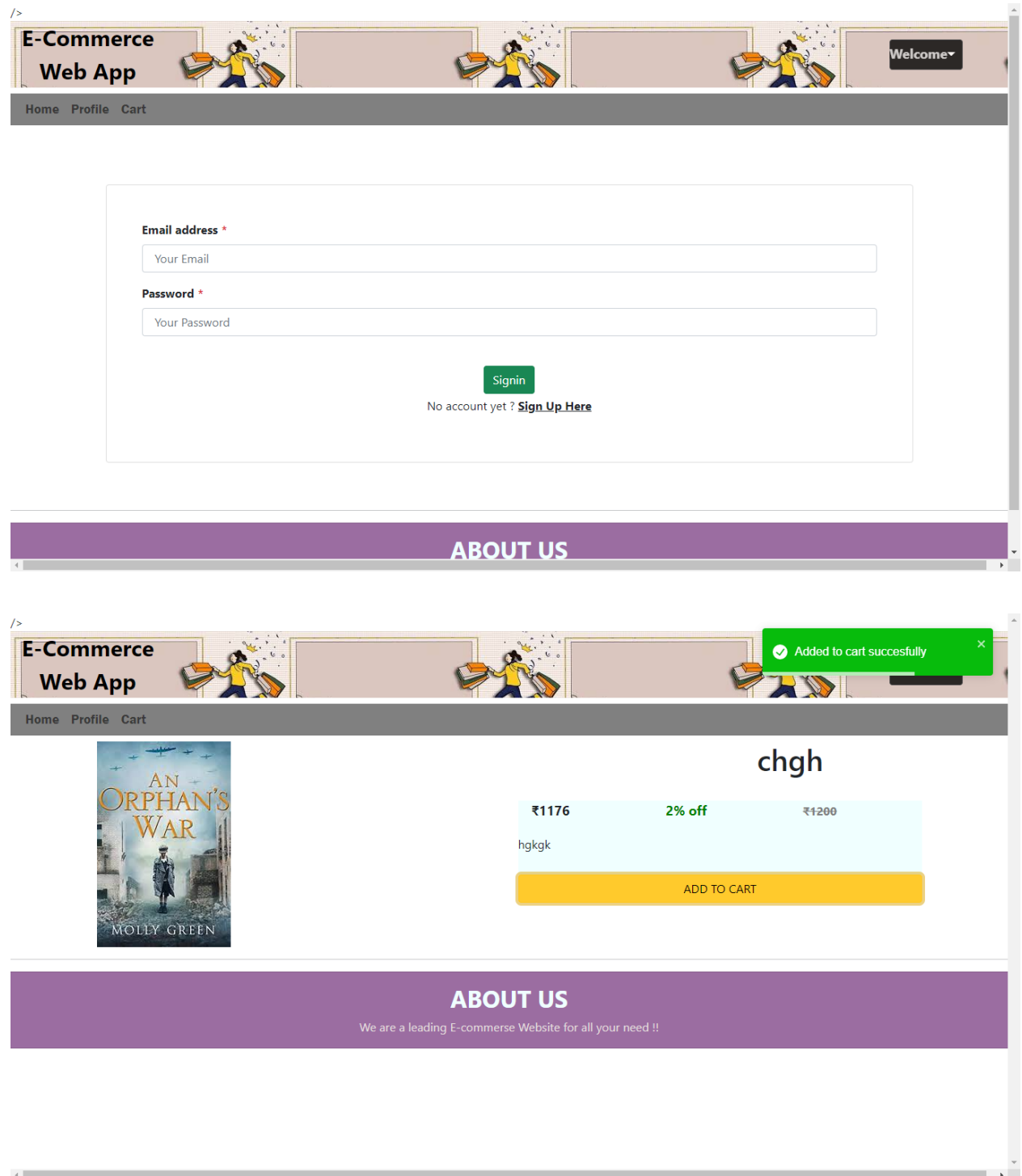
DATA FLOW DIAGRAM LEVEL 1

2-level DFD



Chapter5: USER INTERFACES(UI)


● UI-1: Login Page:





UI-2:Registration Page

/>

E-Commerce
Web App







Welcome ▾

Home Profile Cart

Create Account

First Name *

Last Name *

First Name

Last Name

Profileimage Url *

upload your photo on imgBB and paste url here

Email Address *

Your Email

Mobile *

Enter Mobile number

Password *(Must be 8-20 characters long)

Select a Secure Password

Confirm Password *

UI-3 Profile

/>


**E-Commerce
Web App**

Press **F11** to exit full screen

Welcome
kabir

Home Profile Cart

kabir Profile



Insert Product

Products By me

Userid

11

First Name

kabir

Last Name

hipparkar

Profileimage Url

kabir

Email Address

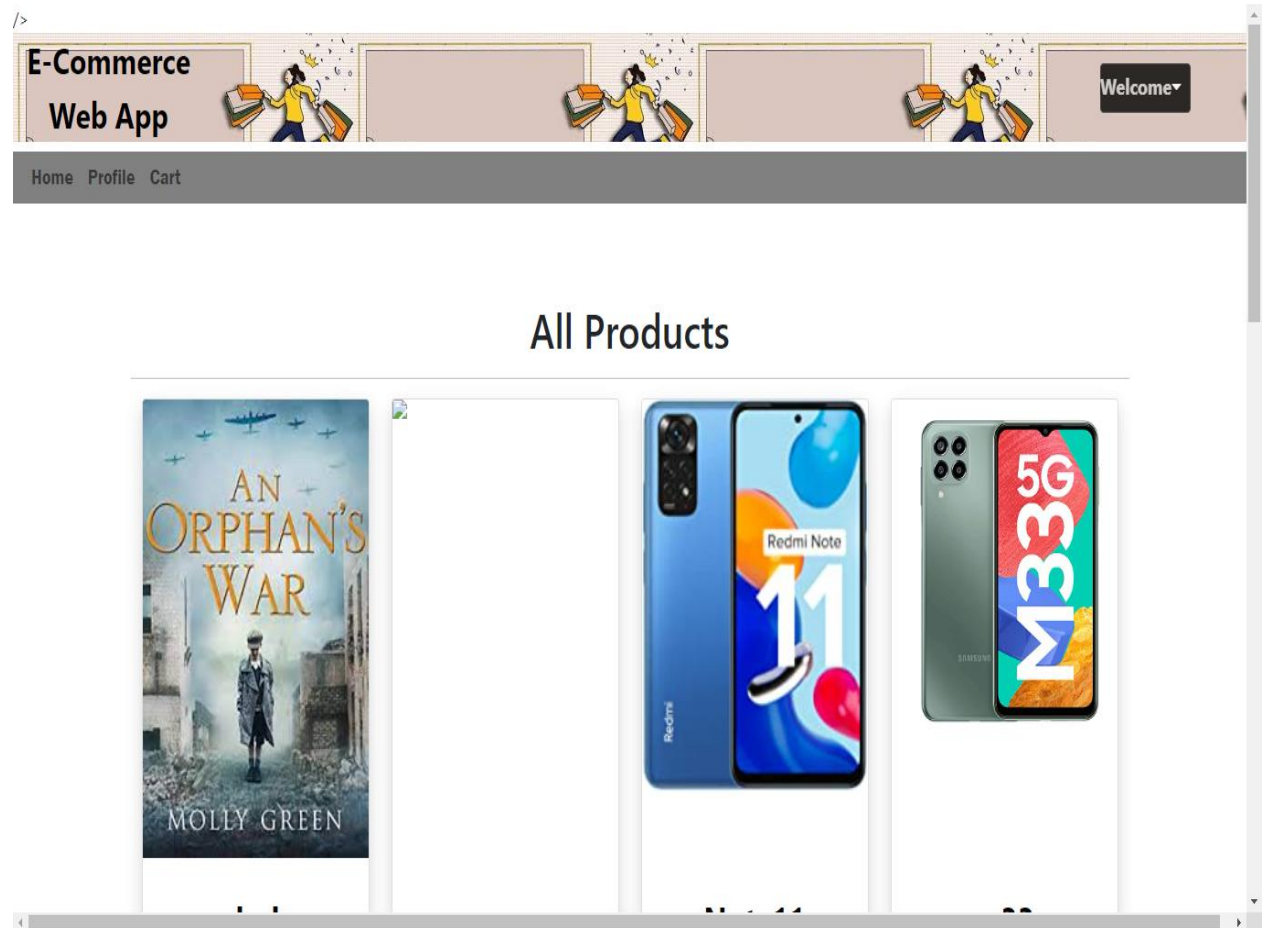
kabir@gmail.com

Mobile

8275135353

Wallet Balance

UI-4 PRODUCT LIST



UI-5 DATABASE COLLECTION

```

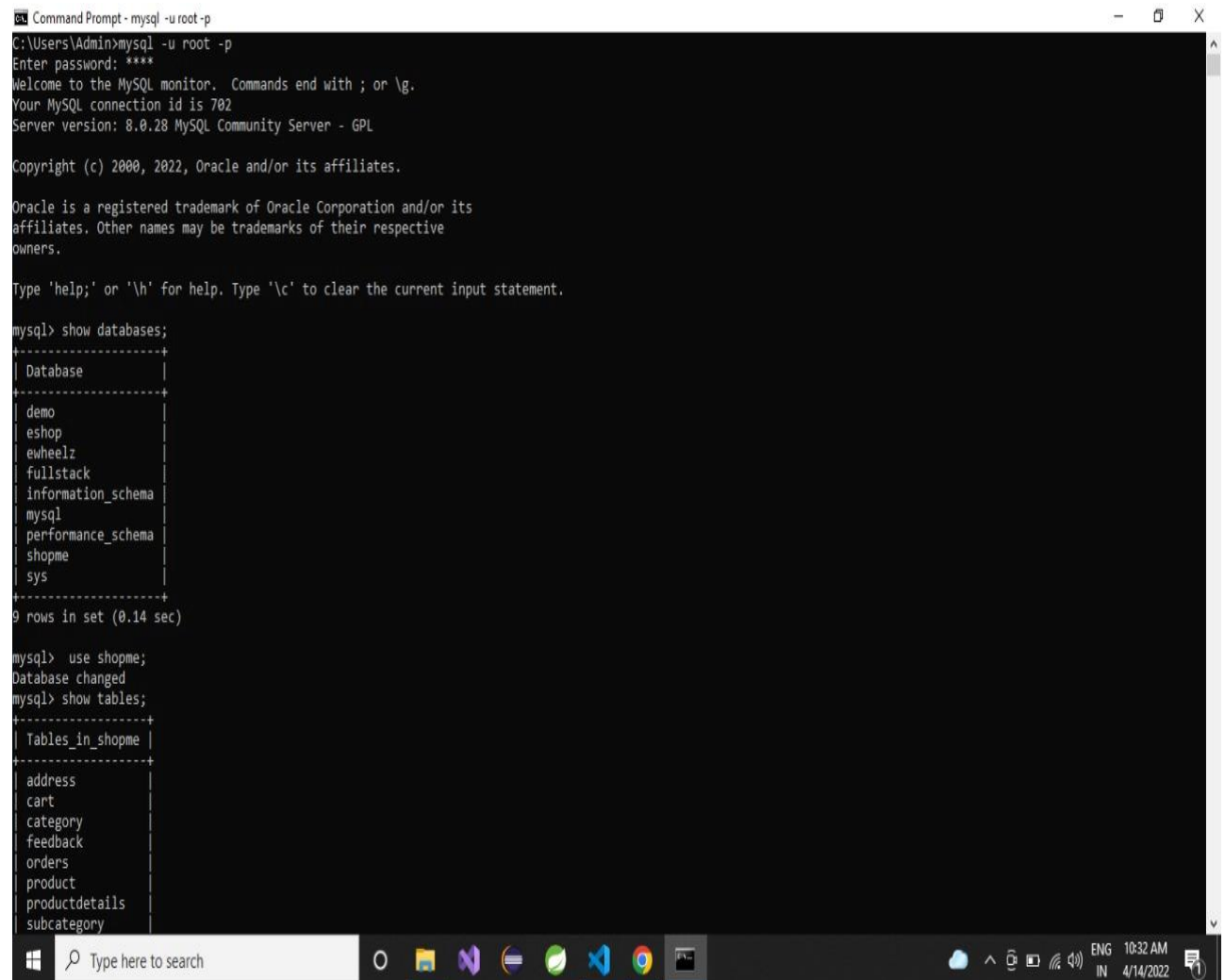
Command Prompt - mysql -u root -p

mysql> select * from user;
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| userId | email                | firstName | gender | lastName | mobile | password | profileImg | role | walletBalance |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | sa@                  | s         | NULL   | a         | 827515060 | 1234     | dfdf       | Vendor | 0              |
| 2 | aa@                  | Magar     | NULL   | Ramakant  | 8275151090 | NULL     | nbmm       | Customer | 110642         |
| 3 | bb@                  | NULL      | NULL   | NULL      | 0         | NULL     | NULL       | Admin | 10000          |
| 4 | rohit@               | rohit     | NULL   | magar     | 8275151090 | 123      | good       | Admin | 8380           |
| 5 | k@                   | kabir     | NULL   | h         | 8275151090 | 123      | kkjk       | Vendor | 5901           |
| 6 | shubham@gmail.com    | NULL      | NULL   | NULL      | 0         | NULL     | NULL       | Admin | 0              |
| 7 | shubh@              | sa        | NULL   | ada       | 432565    | 123      | zccz       | Customer | 98515          |
| 8 | p@gmail.com          | Priyanka  | NULL   | m         | 8275151090 | 123      | https://i.ibb.co/2crZrKb/logo.png | Customer | 99595          |
| 9 | onkar@gmail.com      | onkar     | NULL   | patil     | 8275151090 | 123      | ghjgh      | Customer | 0              |
| 10 | shailesh@gmail.com   | shailesh  | NULL   | gambhire  | 8256535535 | 123      | shailesh   | Admin | 0              |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.02 sec)

mysql> select * from user;
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| userId | email                | firstName | gender | lastName | mobile | password | profileImg | role | walletBalance |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | sa@                  | s         | NULL   | a         | 827515060 | 1234     | dfdf       | Vendor | 0              |
| 2 | aa@                  | Magar     | NULL   | Ramakant  | 8275151090 | NULL     | nbmm       | Customer | 110642         |
| 3 | bb@                  | NULL      | NULL   | NULL      | 0         | NULL     | NULL       | Admin | 10000          |
| 4 | rohit@               | rohit     | NULL   | magar     | 8275151090 | 123      | good       | Admin | 8380           |
| 5 | k@                   | kabir     | NULL   | h         | 8275151090 | 123      | kkjk       | Vendor | 5901           |
| 6 | shubham@gmail.com    | NULL      | NULL   | NULL      | 0         | NULL     | NULL       | Admin | 0              |
| 7 | shubh@              | sa        | NULL   | ada       | 432565    | 123      | zccz       | Customer | 98515          |
| 8 | p@gmail.com          | Priyanka  | NULL   | m         | 8275151090 | 123      | https://i.ibb.co/2crZrKb/logo.png | Customer | 99595          |
| 9 | onkar@gmail.com      | onkar     | NULL   | patil     | 8275151090 | 123      | ghjgh      | Customer | 8920           |
| 10 | shailesh@gmail.com   | shailesh  | NULL   | gambhire  | 8256535535 | 123      | shailesh   | Admin | 0              |
| 11 | kabir@gmail.com      | kabir     | NULL   | hipparkar | 8275135353 | 123      | kabir      | Vendor | 11080          |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
11 rows in set (0.02 sec)

mysql>

```



```
Command Prompt - mysql -u root -p
C:\Users\Admin>mysql -u root -p
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 702
Server version: 8.0.28 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+-----+
| Database |
+-----+
| demo     |
| eshop     |
| ewheelz   |
| fullstack |
| information_schema |
| mysql     |
| performance_schema |
| shopme    |
| sys      |
+-----+
9 rows in set (0.14 sec)

mysql> use shopme;
Database changed
mysql> show tables;
+-----+
| Tables_in_shopme |
+-----+
| address           |
| cart              |
| category           |
| feedback          |
| orders            |
| product           |
| productdetails    |
| subcategory       |
+-----+
```

FURNITURE





ELECTRONICS


**Qualcomm
5G SoC**


**5000mAh
Battery**


**90Hz
Hyper-color**


ColorOS 11.1




**48MP
AI Triple Camera**


**Premium
Design**


**Multi-cooling
System**


6GB+128GB



Chapter 6:

TESTING

Software testing is an investigation conducted to provide stakeholder with information about the quality of the product or service under test, software testing can be stated as the process of validating and verifying that a software that a software program/product:

- 1) Meets the requirement that guided its design and development
- 2) Works as expected; and
- 3) Can be implemented with the same characteristics

UNIT TESTING:

Unit testing also known as compound testing refers to tests that verify the functionality of a specific section of code, usually at the function level, In an object oriented, this is usually at the class level, and the minimal unit tests include the construction and destruction.

In this project we have been tested every form for input to check for script applied to the forms and stored efficiently in the database.

INTEGRATION TESTING :

Data can be across an interface and verify the interface between compound against a software design. Software compounds may be integrated in an iterative way or all together ("big bang").

BLACK BOX TESTING

It treats the software as a black box without any knowledge of internal implementation.

Black box testing is a technique of software testing which examines the functionality of software without peering into its internal structure or coding. The primary source of black box testing is a specification of requirements that is stated by the customer.

In this method, tester selects a function and gives input value to examine its functionality, and checks whether the function is giving expected output or not. If the function produces correct output, then it is passed in testing, otherwise failed. The test team reports the result to the development team and then tests the next function. After completing testing of all functions if there are severe problems, then it is given back to the development team for correction.



AD HOC TESTING

This testing we do when the build is in the checked sequence, then we go for Ad-hoc testing by checking the application randomly.

Ad-hoc testing is also known as **Monkey testing and Gorilla testing**.

It is negative testing because we will test the application against the client's requirements

CHAPTER 7

FUTURE ENHANCEMENTS

With the advent of the Internet as a business enhancer, e-commerce websites have been quick to cash in on this trend. More and more websites are being designed which provides customers with the benefit of availing the desired product and services at one click of the mouse.

The advent of mobile devices has energized the Internet with mobility. It is now available to the consumer wherever and whenever required. Moreover, the emergence of responsive designs and other more technologically advanced web designs have enabled the e-stores to be easily available on your smart phones, tablets and other mobile devices.

1. Mobile commerce
2. Electronic funds transfer
3. Supply chain management
4. Internet marketing
5. Online transaction processing
6. Electronic data interchange (EDI)
7. Inventory management systems
8. Automated data collection systems

CHAPTER 8

CONCLUSION

E-commerce still represents one of the business methods that take advantage if done the right way, even if the stock market and commodities fell, but E-Commerce still able to survive and receive high transaction. E-commerce has a tremendous opportunity in the course of or business in Malaysia. In addition, it is also to introducing new techniques and styles in a transaction. Use the extensive E-Commerce in the Internet world is actually much better to bring the goodness of the individual or the state.

E-Commerce has undeniably become an important part of our society. The successful companies of the future will be those that take E-Commerce seriously, dedicating sufficient resources to its development. E-Commerce is not an IT issue but a whole business undertaking. Companies that use it as a reason for completely re-designing their business processes are likely to reap the greatest benefits. Moreover, E-Commerce is a helpful technology that gives the consumer access to business and companies all over the world.

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